

Programme to Conserve the Urban Biodiversity of Kolkata City with School Students

Introduction

Diti Mookherjee as Project Leader received a Rufford Small Grant of £4931 for the project “Programme to conserve the urban biodiversity of Kolkata City with school students” in October 2004. The Project was for one year and involved working intensively with 15 schools in Kolkata to make them aware of their natural urban heritage and promote efforts to conserve it.

The Project has been completed. 15 schools were exposed to the biodiversity of Kolkata. Project work was done in 14 schools as 1 school dropped out of the Project after the exposure stage due to internal administration problems. Diti Mookherjee along with Kushal Mookherjee, Member National Board for Wildlife, India and State Wildlife Advisory Board, West Bengal and Samya Basu, Programme Associate, ASED¹ constituted the Project Team that conducted the Project. There was some saving in funds and thus the Project could be extended till March 2006.

Methodology

The Project work commenced in November 2004. 15 schools were chosen for the Project. The criteria for selection were that different parts of Kolkata city were covered, that the school authorities were willing to conduct the Project and that there was a mix of Government schools, private schools and schools for under-privileged students. We worked with three non-government organizations (NGOs) that support schools for under-privileged children. A meeting was conducted with the school principal to explain the Project and each participating school signed an agreement letter. Students of Classes 7 and 8 (age-group 12 to 14 years) in each participating school viewed a slide-illustrated talk on “Biodiversity of Kolkata”. This was followed by an interactive session in which the students asked perceptive questions. After this, based on the interest shown by the students, the teachers and the Project team chose 25 children to be part of the Core Group. 2 or 3 teachers from each school were also designated to be part of the Core Group.

The Core Group of each school was taken for a local field trip to learn about the biodiversity that the area surrounding them harbours. They were given a booklet that contains information on what is biodiversity, the biodiversity present in Kolkata and how to know it, a checklist of common birds and trees found in Kolkata and a write up on the Indian Botanic Gardens. The booklets were made in English and Bengali and given to the Core Groups according to their medium of instruction. Nature Games were played to explain the concept of classification of animals and plants and the interdependence in nature. After the local field trip, the Core Groups were taken to the Indian Botanic Garden to see what a Biodiversity Hotspot near the city harbours.

After this exposure to the biodiversity of Kolkata, the Core Groups were given the task of formulating projects through which they could conserve the biodiversity of Kolkata. The Project Team held meetings with the Core Groups to assist them in this task. They were

¹ ASED (Association for Social and Environmental Development) is a non-profit making organization based in Kolkata with the work objective of biodiversity conservation through public awareness, action research and people's participation for sustainable development.

encouraged to plan out their projects, make a work plan, arrange for funds for the same and communicate their project idea to the school authorities and get approval. Some Core Groups did remarkably well in devising their own projects. Others took a while to move out of the “top-down” instruction approach. Follow up visits were done to assist the Core Group with the ongoing projects. Visits were also made on request of the Core Group. Mr. N.N. Chatterjea, an expert on flora assisted the Project Team at this stage. The Core Groups were assisted in networking with other organizations as and when needed.

A few illustrative examples of the school projects are:

- All schools have conducted an intra-school awareness programme regarding Kolkata’s Biodiversity.
- Survey on the status of the water monitor in their locality and campaign to preserve the habitat (*Sarangabad Jajneshwari Pathshala Girls’ High School*)
- Local plant diversity study and tree plantation in local parks (*Metropolitan Institution*)
- Name tags on trees in school garden, establishing and maintaining a medicinal plant garden (*Lake Town Government Sponsored Girls’ High School*)
- Local awareness campaign regarding wetland conservation, conservation of electricity and drinking water (*Children’s Foundation*)

A detailed report of the activities in each school, number of participants and project work is attached.

At the end of the Project, each Core Group member was given a booklet on the Places of Biodiversity interest in and around Kolkata. The students of the Core Group were each given a certificate of participation.

Learning

- ✓ The project output, in the form of school projects, from some schools has exceeded our expectations. The manner in which schools like *Sarangabad Jajneshwari Pathshala Girls’ High School*, *Lake Town Government Sponsored Girls’ High School* and *Ananda Ashram Balika Bidyalaya* are conducting their projects is inspiring. The students are taking the initiative to conduct the projects. They have merged the project into their regular eco-club² activities thus making it sustainable in future.
- ✓ The level of interest of all the schools could not be sustained. A detailed analysis reveals that:
 - Schools in which both teachers and students are interested and serious about the Project
 1. Lake Town Govt. Sponsored Girls’ High School
 2. Ananda Ashram Balika Vidyapith
 3. Beltala Girls’ High School
 4. Sarangabad Jajneshwari Pathshala Girls’ High School
 5. Children’s Foundation

² Eco-clubs are school nature clubs formed under the National Green Corps programme of the Ministry of Environment and Forests, Government of India.

6. Metropolitan Institution (Main)

- Schools in which both teachers and students are interested in the project but the problem is lack of time and lack of interest of the school management
 1. Sahapur Girls' High School
 2. Kendua Mahendranath Girls' High School
 3. Mayurbhanj Joint Citizen's Committee
 4. Bagmari Progressive Youth Association
- Schools in which teachers are not interested in the project but students want to continue with Project
 1. Taltala High School
 2. Vivekananda Mission School
 3. All India Women's Conference
 4. Patha Bhaban
- School in which teachers and school authorities not interested in Project
 1. Army Public School

From this analysis we feel that we would like to continue working intensively with the schools that wish to sustain their projects. The remaining schools will be kept in our school network and will be involved from time to time in the activities conducted by ASED.

- ✓ Besides the Rufford Project, the schools were also involved in activities conducted by ASED, the Forest Department of West Bengal, Aranyak and Birla Industrial and Technological Museum. These activities have increased the exposure of these schools to nature activities and assisted them in networking with other related organizations in the city. Thus there are schools that do not want to do a regular project but would like to be involved in nature activities from time to time.
- ✓ The age-group 12 to 14 years of students is an ideal age-group. These students are in Classes 7 and 8 where the pressure of public examinations is not present. They are at an impressionable age and their interest once captured can lead to a long-lasting effect.
- ✓ The most challenging task we had was to motivate the school authorities and teachers. However we have succeeded to a certain extent. To maintain their interest repeated activities need to be conducted.
- ✓ The Project has been very well received by the schools, the Forest Department and NGOs in the city. We feel this is just the beginning of a movement to Conserve Kolkata's Biodiversity with school students. We are grateful to the Rufford Small Grants programme for giving us this wonderful opportunity to initiate this movement.

Future Perspective

We wish to sustain the programme in Kolkata city as well as extend the programme to other parts of urban West Bengal. We also wish to develop an urban biodiversity network of schools and organizations working on urban biodiversity in India.

Expenditure Statement

November 2004 to October 31, 2005

Item	Expenditure (in £ sterling) £1 = Rs. 81.36
Honorarium	1880
Project Leader £ 737	
Field Coordinator £ 516	
Resource Persons £ 627	
Transport (for Project Leader, Field Coordinator, Resource Persons, Field Trips for Core Groups)	1275
Resource Material Production	460
Booklet on Biodiversity £ 153	
Slide Presentation on Kolkata's Biodiversity £ 307	
Equipment Purchase, Maintenance and Consumables	390
Purchase	
Slide Projector £ 184	
Slide Projection Screen £ 33	
Digital Camera £ 94	
Equipment Maintenance £ 20	
Consumables £ 59	
Administration	231
(including telephone and office maintenance)	
Total	4236

November 2005 to March 31, 2006

Item	Expenditure (in £ sterling) £1 = Rs. 81.36
Honorarium	111
Field Coordinator £ 86	
Resource Persons £ 25	
Transport (for Project Leader, Field Coordinator, Resource Persons)	97
Resource Material Production	255
• Booklet on Kolkata's Biodiversity Hotspots	
• Participation certificate to the students	
Equipment Purchase, Maintenance and Consumables	75
Maintenance £ 18	
Consumables £ 67	
Administration	157
(including telephone and office maintenance)	
Total	695

Total expenditure: UK £ sterling Four thousand nine hundred thirty one (£ 4931) only

RUFFORD SMALL GRANTS
DITI MOOKHERJEE
“Programme to Conserve the Biodiversity of Kolkata City with School Students”

School-Wise Activity Report

School Self-Naming Report									
Name of the School	Slide illustrated talk	Local field trip				Activity			Project Work
		Date	Place	Number		Date	Number		
				Student	Teacher		Student	Teacher	
Lake Town Govt. Spons. Girls' High School	27.01.2005	21.03.2005	Banabitan	26	4	23.03.2005	25	3	An intra-school awareness campaign / Naming the plant of school garden / Medicinal plant garden / Regular group meeting regarding local biodiversity / Plantation in school ground / Trying to make the school a no plastic school / Maintaining a wall magazine / An intra-school awareness campaign regarding biodiversity / Indigenous flowering plant garden / Participated in an interschool essay and extempore speech competition organized by ASED.
Ananda Ashram Balika Vidyapith	15.06.2005	24.06.2005	School Campus	25	3	30.06.2005	25	3	An intra-school awareness campaign through Naming the plant of school garden Medicinal plant garden Regular group meeting regarding nature Maintaining a wall magazine by collecting data from newspapers Participated in an interschool essay organized by ASED. Forming a network between different schools and NGOs An intra-school awareness campaign / Naming the plant of school garden / Medicinal plant garden / Regular group meeting regarding nature / Maintaining a wall magazine by collecting data from newspapers

Name of the School	Slide illustrated talk	Activity							Project Work
		Local field trip				Trip to Indian Botanic Garden			
		Date	Place	Number		Date	Number		
				Student	Teacher		Student	Teacher	
Beltala Girls' High School	22.12.04	21.01.2005	Rabindra Sarovar	27	1	09.05.2005	18	1	Intra-school awareness campaign through poster competition and cultural programme Plantation in school premises Plantation of medicinal plant Participated in an interschool essay and extempore speech competition organized by ASED. Intra-school awareness campaign through poster competition and cultural programme / Plantation in school premises / Plantation of medicinal plant
Sarangabad Jaineshwari Pathshala Girls' High School	13.01.2005	19.01.2005	Local Wetland	26	2	08.02.2005	25	2	Survey on the status of the water monitor lizard in their locality and campaigning to preserve their habitat Regular group meeting regarding local biodiversity / Participated in an interschool essay organized by ASED / An intra-school awareness campaign / They are doing a regular village-study and documenting the environmental status / Survey on the status of the water monitor lizard in their locality and campaigning to preserve their habitat / Regular group meeting regarding local biodiversity
Children's Foundation	27.04.2005	07.05.2005	Area around school	23	3	08.05.2005	25	2	Doing a local awareness campaign regarding wetland conservation, electricity and drinking water conservation. / Medicinal plant and flowering plant garden to attract butterflies After widening the road in front of school the students will plant trees Participated in an interschool essay organized by ASED.

Name of the School	Activity								
	Slide illustrated talk	Local field trip				Trip to Indian Botanic Garden			Project Work
		Date	Place	Number		Date	Number		
				Student	Teacher		Student	Teacher	
Kendua Mahendranath Girls' High School	01.04.2005	02.04.2005	Area around school	24	2	04.04.2005	19	2	An intra-school awareness campaign regarding biodiversity / After receiving the permission from local authority the students will plant trees in parks and gardens in front of their school and remove Parthenium from there. / Regular group meeting regarding natural environment / Participated in an interschool essay organized by ASED.
Metropolita n Institution (Main)	16.06.05	29.07.05	Subhas Sarovar	25	2	30.07.05	25	2	An intra-school awareness campaign Local plant diversity study / Plantation in local parks and adjoining areas Participated in an interschool essay organized by ASED.
Sahapur Girls' High School	06.01.05	14.01.05	Rabindra Sarovar	24	1	18.04.05	13	1	An intra-school awareness campaign Regular group meeting regarding local biodiversity Participated in an interschool essay organized by ASED.
Mayurbhanj Citizen Con	16.04.05	14.07.05	Calcutta Zoo	33	2	24.08.05	26	3	Doing an anti-plastic campaign in their locality
Bagma Progressive Association	05.07.05	15.07.05	Bidhan Sishu Udyan	25	3	18.07.05	25	2	An intra-school awareness campaign regarding biodiversity Regular group meeting regarding natural environment
Taltala High School	02.04.05	09.08.2005	Subhas Sarovar	21	1	30.06.2005	23	1	An intra-school awareness campaign regarding biodiversity

Name of the School	Activity								
	Slide illustrated talk	Local field trip				Trip to Indian Botanic Garden			Project Work
		Date	Place	Number		Date	Number		
				Student	Teacher		Student	Teacher	
Vivekananda Mission School	21.12.2004	02.04.2005	Joka	25	2	04.04.2005	25	2	An intra-school awareness campaign regarding biodiversity Regular group meeting regarding natural environment Participated in an interschool essay and extempore speech competition organized by ASED.
Patha Bahaban	01.04.2005	02.04.2005	Rabindra Sarovar	11	2	29.08.2005	9	1	Participated in an interschool extempore speech competition organized by ASED
All India Women Conference	12.05.05	17.08.05	Nursery, Social Forestry, Government of West Bengal	16	2	31.08.05	9	2	An intra-school awareness campaign regarding biodiversity Regular group meeting regarding natural environment
Army Public School	12.01.2005	19.01.2005	School Campus	39	2	x	x	x	x